

# **EXHIBIT 4**

## **FILED UNDER SEAL**



**OCEAN TOMO®**

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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA**

CIVIL ACTION NO. 3:20-CV-06754

**GOOGLE LLC,  
v.  
SONOS, INC.**

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**SUPPLEMENTAL EXPERT REPORT OF JAMES E. MALACKOWSKI**

December 9, 2022



Metric	Nov. 5 - Dec. 31						
	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
Android Install Events					6,596,061	6,039,952	5,607,146
Android Operating System Share	44.2%	41.1%	40.5%	40.5%	39.0%	39.0%	41.4%
Total Install Events					16,918,761	15,475,152	
Metric	Oct. 1 - Nov. 15						Total
	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	
Android Install Events	5,794,286	7,267,309	6,310,676	5,752,030	6,108,330	2,979,426	
Android Operating System Share	42.6%	41.3%	41.2%	42.5%	43.8%	44.2%	41.3%
Total Install Events	13,586,727	17,587,873	15,306,030	13,536,312	13,952,330	6,735,449	

## 9. SONOS'S PATENT-PRACTICING PRODUCTS

I understand that Sonos does not practice the direct control technology (and thus the '033 Patent) because they do not specifically offer a computer device that can serve as a controller for the Sonos system, such as a smartphone. As discussed above in Section 8.1, Google, through the Pixel phone and its apps, offers a controller device which enables a consumer to utilize direct control technology.

I understand that, before the release of the S2 app in May 2020, Sonos did not have the ability to create a zone scene either through a controller or a speaker. Since the release of the S2 app, however, I understand that any S2-compatible device would be able to practice the claims of the '885 Patent and the '966 Patent. According to Dr. Almeroth:

*After evaluating Sonos's commercial products and the '885 and '966 Patents, it is my opinion that as of June 2020 the Sonos One, One SL, Play:1, Play:3, Play:5, Five, Move, Roam, Beam, Playbar, Playbase, Arc, Connect, Port, Connect:Amp, Amp, SYMFONISK table lamp WiFi speaker, and SYMFONISK bookshelf WiFi speaker each practice at least claim 1 of the '885 Patent. In addition, it is my opinion that third-party computing devices (e.g., iOS and Android smartphones) installed with the Sonos S2 app practice each of the Asserted Claims of the '966 Patent. These opinions are based on my review of Sonos's First and Second Supplemental Responses to Google's Interrogatory No. 13 and the materials identified therein, as well as my own use of Sonos's commercial products and testing that I oversaw and directed. In addition, these opinions are based on my review of Sonos's Technology Tutorial, which I understand was submitted to the Court in February 2022. Further, this opinion is also based on my review of the patent to product information available on Sonos's website for the '885 and '966 Patents.<sup>178</sup>*

Sonos states that the Sonos One directly competes with every infringing Home and Nest Audio product sold by Google during the damages period.<sup>179</sup> Announced and released in October 2017 at a price point of \$199,

<sup>178</sup> Opening Almeroth Report, p. 329.

<sup>179</sup> Sonos, Inc.'s Preliminary Damages Disclosure Pursuant to Patent Local Rule 3-8, January 25, 2022, p. 7.



INTELLECTUAL CAPITAL EQUITY

**19. SIGNATURE**

Respectfully submitted,

A handwritten signature in black ink, appearing to read "James E. Malackowski", written over a horizontal line.

James E. Malackowski

December 9, 2022

Date